



Secrétariat ISO/TC 153/SC 1
Valves / Design, manufacture, marking and testing

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ISO/TC 153/SC 1 N519

Le comité membre français



Report of ISO/TC 153/SC 1/WG 18
"Fugitive emissions" - September 2001

Association

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

ISO/TC 153/SC 1/WG10 N 125

ISO TC153 SC1 Plenary

Report of activity of ISO/TC 153 / SC1 / WG10

20th & 21st September 2001 – AFNOR StDenis

Convenor : Yves BIREMBAUT , CETIM, France

Secrétariat :



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1 DELEGATIONS

Actually, 11 delegations are participating to the Working Group

- Austria,
- Canada
- France,
- Germany,
- Israël
- Italy,
- Japan
- Spain
- The Netherlands
- United Kingdom
- United States,
- Switzerland

The ESA (European Sealing Association) having expressed a great interest in the work, it was agreed that the ESA should be a part of the discussion group for the purpose of the development of the standard, but without vote.

2 WORKING GROUP MEETINGS

1st meeting

Date : 13 and 14 october, 1997

Place : MAISON DE LA MECANIQUE
39/41 Rue Louis Blanc
92400 COURBEVOIE (France)

2nd meeting

Date : 28/29/30 January, 1998

Place : HOTEL DIANA
Via Principe Amedeo 4
ROME (Italy)

3rd meeting

Date : 19/20 November, 1998

Place : CONGRESS CENTRUM
Churchillplein 10
THE HAGUE (The Netherlands)

4th meeting (1999)

Date : 28/29/30 March, 1999

Place : Austria Standards Institution (ON) Vienna
Österreichisches Normungsinstitut
Heinestrasse 38
A1021 WIEN (Austria)

5th meeting (1999)

Date : 29/30 September and 1st October, 1999
Place : Hotel LIBERTEL CLARET
Cité Mondiale
20 Quai des Chartrons
33080 BORDEAUX (France)

6th meeting (2000)

Date : 21/23 February 2000
Place : JVMA
Kikai Shinko Bldg, 3-5-8, Shibakoen
Minato-ku
TOKYO, 105 JAPAN

3 SINCE TOKYO MEETING

7th meeting

Date : 25 et 26 septembre 2000
Place : MAISON DE LA MECANIQUE
39/41 Rue Louis Blanc
92400 COURBEVOIE (France)

8th meeting

Date : 1st and 2nd december 2000
Place : Netherlands Congress Center
Breitner 1 meeting Room
1st floor of NCC
The Hague, the Netherlands

9th meeting

Date : 17th and 18th May 2001
Place : VDMA
Vorstandszimmer (room), 8th floor
Lyoner Str 18
60528 Frankfurt am Main (Niederrad)

4 MAIN DECISIONS IN 2000 AND 2001

During the Valve World Conference in the Hague, and during the 8th meeting (1st and 2nd december 2000) in The Hague, the Netherlands some End Users have expressed strong negative comments on WG10 work and have asked the possibility to present "a common proposal from end users to WG10. They have asked a 3 months delay to prepare the document.

This was accepted by WG10 and a meeting planned in Frankfurt, on 17th and 18th May 2001.

A proposal was presented by Cees Glansdorp N113 & N119 but not fully supported by end users (US, UK, German, French comments N115 to N121). Nevertheless the proposal was discussed. The WG10 has thanked Cees Glansdorp for his important work. His proposal is the only one we have received from End Users from The Hague.

After a two days meeting, main decisions are:

The WG10 has unanimously decided that "Part 3 – On site measurement" is not to be included in the Standard.

Considering WD 15848-1 :

- o test fluid may be helium or methane

- o global measurement for stem sealing system (vacuum or flushing method)
- o local (sniffing method) for body seals

Table 1 : Tightness classes for stem (or shaft) seals (Fluid : Helium)

Expressed in $(mg.s^{-1}.m^{-1})$ measured with global leakage method as defined in Annex "A".	
CLASS AH	$10^{-6} mg.s^{-1}.m^{-1}$ helium
CLASS BH	$10^{-4} mg.s^{-1}.m^{-1}$ helium
CLASS CH	$10^{-3} mg.s^{-1}.m^{-1}$ helium
CLASS DH	$10^{-2} mg.s^{-1}.m^{-1}$ helium

Table 2 : Tightness classes for stem (or shaft) seals (Fluid : Methane)

Expressed in $(mg.s^{-1}.m^{-1})$ measured with global leakage method as defined in Annex "A".	
CLASS AM	$10^{-6} mg.s^{-1}.m^{-1}$ Methane
CLASS BM	$10^{-4} mg.s^{-1}.m^{-1}$ Methane
CLASS CM	$10^{-3} mg.s^{-1}.m^{-1}$ Methane
CLASS DM	$10^{-2} mg.s^{-1}.m^{-1}$ Methane

Table : 3 : Emissions from body seals for Helium & Methane

Expressed in ppmv measured with the sniffing method as defined in Annex "B"
Measured concentration : ≤ 50 ppmv Helium
Measured concentration : ≤ 50 ppmv Methane

The working group 10 has finally agreed on a document to be submitted by the Convenor to SC1 before the next meeting in Paris.

The committee decided not to have an additional meeting and that the document will be sent to all members for information.

Date and place of the next meeting will depend on an answer from the SC1.

It is the intention of the chairman to attempt to plan a meeting within one month after the review by the SC1.

5 LIST OF EXPERTS

Name	Delegation
MATEJKA Anton	Austria
HAFAR R.A.	Canada
HUBACEK M.	Canada
GARRIGUES J. Claude	France
BIREMBAUT Yves (convenor)	France
PONS Philippe	France
SIMON Hubert	France
SERVANT Antoine	France
MONIER M.	France
VENNER Etienne	France
KUJAWSKI Bernd	Germany
NAEGEL Heinz	Germany
WODARA Gunter	Germany
TEMBRINK Hartmut	Germany
PEREZ Reuben	Israel
RANIERO SCOTTO	Italy
PEREGO A.	Italy
GARSIULO Paolo	Italy
MEOLA Sergio	Italy
MARABOTTI Paolo	Italy
CARACCILO A.	Italy
MURONI Paolo	Italy
SATOH Koh	Japan
TADAHIRO MURAKAMI	Japan
KUIPERS M.	Netherlands
GLANSDORP Cees	Netherlands
ESTEVE Bernal	Spain
WALLACE Deric	Switzerland
HARRISON David	UK
GREENHALGH Martin	UK
MERRIFIELD R.	UK
WILDER B.	UK
McLEAN W.N.	USA
DAVIS Rich	USA
SONDEREGGER Henry R.	USA
BASSETT Bruce C.	USA
JOLLY Guy A.	USA
BOJARCZUK R.	USA
LATTY Cyril X	ESA
SOUTHALL John	ESA
VENNER Etienne	IEC/TC65/SC65B

6 LIST OF DOCUMENTS

ISO TC153/SC1/WG10

Numbered documents list communicated since the 22nd July 1997

N1 E/F	Draft agenda for the 1st meeting of ISO TC153/SC1/WG10 (Maison de la mécanique 13/14 October 97)	22nd July 1997
N2	IEC Draft reference 534-4 (2nd edition) : Industrial-process control valves - Part 4 : inspection and routine testing (P. Maroni, Italy)	December 1995
N3	ISA-ds93.0.01 Draft 12 "Standard method for the evaluation of external leakage of manual and automated on-off valves" (R. Davis, America)	April 1997
N3 Rev 2	ISA-ds93.0.01 Draft 14 "Standard method for the evaluation of external leakage of manual and automated on-off valves" (R. Davis, America)	April 99
N4	FCI 91-1-1994 Fluid controls institute document "Standard for qualification of contrôle valve stem seals" (R. Davis, America)	April 1998
N5	MSS Project 93-17 "Valve fugitive emission measurement and classification" (R. Davis, America)	8 July 1997
N6	MSS SP117 "Bellows Seals for Globe and Gate Valves" (G. Jolly, America)	April 1996
N7	MSS SP121 "Qualification testing method for stem packing for rising stel valves" (G. Jolly, America)	March 1997
N8	ASME 5 1992 Article 10 Leak testing (G. Jolly, America)	June 1997
N9	EPA Method 21 "Emission measurement technical information center NSPS test method" (D. Markwordt)	September 1993
N10	Demonstrating Alternative Work Practices for Fugitive Leak Detection and Repair (LDAR) programs, per draft #2 6/30/97 (R. Davis, America)	Not received
N11	"Qualification of packings on 4" and 8" valves : Elf-Malbranque-CETIM testing procedure" (Ph. Grosbois, France)	June 1998
N12	"BP procedure for packing qualification, On-Off valves" (D. Harrison, UK)	September 1994
N13	BP "Fugitive emission tests on control and quarter turn valves" (D. Harrison, UK)	April 1997
N14	Exxon Research & Engineering information, Representatives from the Perf. 93-20 study in attendance at ISO, Garlock, Kitz, Grinnel, BP and Phillips are to contact Exxon to determine the possibility for release of the information	Not received
N15	Minutes of the meeting - Inaugural meeting of ISOTC153/SC1/WG10 (Maison de la mécanique 13/14 october 1997)	October 1997
N16 E/FIG	Resolutions ISO TC153/SC1/WG10	October 1997
N16 E/FIG-Rev1	Resolutions ISO TC153/SC1/WG10	June 1998
N17	Doc ISO TC153/SC1/N437E	February 1997
N18	Doc ISO TC153/SC1/WG10 N17 rev. 1	October 1997
N19	Draft agenda for 2nd meeting of ISO TC153/SC1/WG10 (Rome - 28-30 January 98)	December 1997
N20	Document S-981231 Japanese comments on draft ISO TC153/SC1/WG10 N18 (Shosuke Naitoh)	January 1998
N21	Draft agenda for 2nd meeting of ISO TC153/SC1/WG10 (Rome - 25/26/27 March 98)	28 January 1998
N22	Italian comments on draft ISO TC153/SC1/WG10 N18	25 February 1998
N23	US Comments on draft ISO TC153/SC1/WG10 N18	14 March 1998
N24	EDF/SEPTEN - HT-22/94/036/C - Procédure de qualification des garnitures d'étanchéité de la robinetterie	16 February 1998
N25	Stem position testing proposal (B.C. Basset)	27 May 1998

N26	ISO Meeting, Rome (Italy) March 25,26,27 1998 - Minutes	March 1998
N27	Doc ISO TC153/SC1/WG10 N17 Rev 2	March 1998
N28	Draft agenda for 3rd meeting of ISO TC153/SC1/WG10 - The Hague November 1998	July 1998
N29	ISO TC153/SC1 Plenary - Report of activity of ISO/TC153/SC1/WG10	August 1998
N30	Proposal from France	October 1998
N31	Meeting Room of November 98	October 1998
N32	Italian comments to draft N27	October 1998
N33	Japanese comments to draft N30	October 1998
N34	ISO Meeting, The Hague, The Netherlands, November 19/20, 1998 - Minutes	November 1998
N35	Doc ISO TC153/SC1/WG10 N17 Rev 3	November 1998
N36	Draft agenda for 4th meeting of ISO TC153/SC1/WG10 - Wien - March 1999	March 1999
N37	Italian comments to draft N35	March 99
N38	Japanese comments to draft N35	March 99
N39	French comments to draft N35	March 1999
N40	English comments to draft N35	March 99
N41	US Comments to draft N35	March 99
N42	ISO Meeting, Vienna (Austria) March 29,30,31 March, 1999 - Minutes	March 99
N43	Doc ISO TC153/SC1/WG10 N17 Rev 4 now ISO WD 15848-1-5	March 99
N44	Lettre 991955 (envoi documents)	May 99
N45	Draft agenda of 5th meeting of ISO TC153/SC1/WG10 - Bordeaux	September 99
N46	Draft summary of comments on ISO/WD 15848.1-5	July 99
N47	Document from Japan	August 99
N48	ISO meeting, Bordeaux (France) September 29,30 and october 1st, 1999 - Minutes	September 99
N49	ISO WD 15848-1-6	September 99
N50	ISO WD 15848-2-0	September 99
N51	ISO TC153/SC1 Plenary - Report of activity of ISO/TC153/SC1/WG10	January 2000
N52	Italian comments to draft N49	November 99
N53	Draft agenda of 6th meeting of ISO TC153/SC1/WG10 - Tokyo	January 2000
N54	Letter from Barrie Kirkman to D. Harrison	September 99
N55	Letter from Y. Birembaut to B. Kirkman	February 2000
N56-1/2	Proposal for appendix A "Leak measurement using the global method" and B "Leak measurement usign the sniffing method"	February 2000
N57	Report on the fugitive emission type testing	February 2000
N58	Letter from E. SMITH to D. Harrison	January 2000
N59	Letter from BP Amoco	February 2000
N60	Japan comments to draft N49	February 2000
N61	Letter from Kitz Corporation	February 2000

N62	Verification of equivalence in the meaning of TA Luft (Air Quality Directives (RWTUV))	September 1998
N63	Letter from J.C. Garrigues to Schaffer (IEC/TC 65/SC 65B Chairman)	December 1999
N64	Letter from BFE	February 2000
N65	Fugitive emission leak detection of valves (MESC additional requirement - SPE 77/312)	February 2000
N66	Fugitive emission leak detection of valves (MESC additional requirement - SPE 77/312)	March 2000
N67-1/2	Proposal for appendix A "Leak measurement using the global method" and B "Leak measurement using the sniffing method"	June 2000
N68	Letter to David W. Reeves	
N69	Meeting Minutes (Tokyo)	February 2000
N70-1/2	Resolutions 2000-1 and 2000-2 (Meeting February 2000 - Tokyo)	February 2000
N71	ISO WD 15848-1-7	May 2000
N72	ISO WD 15848-2-1	May 2000
N73	Draft agenda of 7th meeting of ISO TC153/SC1/WG10 - Paris	June 2000
N74	Evaluation of measurement methods : report of ISO TC153/SC1/WG10	April 2000
N75	Japan comments to draft N69	June 2000
N76	Italian comments to draft N69	June 2000
N77	UK comments to draft N69	June 2000
N78	UK comments to draft N69	August 2000
N79	New draft agenda of 7th meeting in Paris	September 2000
N80	Liaison with IEC SC65B/WG9	August 2000
N81	Remarks from IEC SC65B/WG9	August 2000
N82	US comments to draft N69	September 2000
N83	Germany comments to draft N69	September 2000
N84	Shell MESC additional requirement "Fugitive emission leak detection of valves" (Glansdorp)	21 August 2000
N85	ANSI/ISA - S93,00,001-1999 "Standard method for the evaluation of external leakage of manual and automated on-off valves"	January 2000
N86	Minutes of 7th meeting of ISO TC153/SC1/WG10	September 2000
N87	ISO WD 15848-1-8	October 2000
N88	Proposal for appendix A and B (measurement)	October 2000
N89	Draft agenda of 8th meeting of ISO TC153/SC1/WG10 La Haye	December 2000
N90	Document KITZ - Comments of Japan	November 2000
N91	Corrosion testing procedures	July 2000
N92	Non-destructive testing - Leak testing - Criteria for method and technique selection	August 1999
N93	Standard for qualification of control valve stem seals - FCI doc 91-1-1997 (revision of N4)	November 2000
N94	Shell MESC SPE 77/312 additional requirement "Fugitive emission leak detection of valves" (Glansdorp)	3 November 2000
N95	Proposed Chevron procedure for testing valve packing (D. Reeves)	11 November 2000
N96	Comments from US	November 2000

N97	Comments from UK	November 2000
N98	Proposal for informative appendix from UK	November 2000
N99	Proposal for annex A2 from UK	November 2000
N100	Comments from Italy	November 2000
N101	Comments from Germany	November 2000
N102	Shell MESC SPE 77/312 additional requirement "Fugitive emission leak detection of valves" dated 22.11.2000 (Glansdorp)	November 2000
N103	End users observations and proposals	December 2000
N104	Shell MESC SPE 77/312 additional requirement "Fugitive emission leak detection of valves" dated 2.12.2000 (Glansdorp)	December 2000
N105	Minutes of 8th meeting of ISO TYC153 SC1 WG10	December 2000
N106	ISO WD 15848-1-9	December 2000
N107	ISO WD 15848-1 Appendix A1, A2, B N88 Rev 1	December 2000
N108	AK20 Procedures	
N109	Shell MESC SPE 77/312 additional requirement "Fugitive emission leak detection of valves" dated 2.01.2001 (Glansdorp)	January 2001
N110	Barrie Kirkman presentation	January 2001
N111	Shell Global Solutions	
N112	Italian comments	March 2001
N113	End users proposals	March 2001
N114	Minutes of the presentation of the draft of ISO 15848 - Part 1 to 3 during the meeting of the adhoc-work committee valves of VCI	April 2001
N115	Total Fina Elf comments	March 2001
N116	French comments to draft N35	April 2001
N117	Note of Panel PSE/7/1/11 Fugitive Emissions Meetings Held at BSI Chiswick 26/04/01	April 2001
N118	Draft agenda of 9th meeting of ISO TC-153/SC1/wg10 Frankfurt	May 2001
N119	New End Users proposals (Cees Glansdorp) (N113 revised)	May 2001
N120	German Comments on end user proposal	May 2001
N121	United States Valve Manufacturer, End user Type Test	May 2002
N122	Minutes of Francfort's meeting	September 2001
N123	ISO WD 15848-1 sent to SC1	September 2001
N124	ISO WD 15848-2 sent to SC1	September 2001
N125	Report of activity of ISO/TC 153 / SC1 / WG10	September 2001